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Descrizione fisica	1 online resource (305 pages)
Collana	Signals and Communication Technology, , 1860-4862
Disciplina	621.367 006.42
Soggetti	Signal processing Image processing Speech processing systems Optical data processing Signal, Image and Speech Processing Image Processing and Computer Vision
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Distortion-free Image Capturing at Scanning/Copying of the Bound Documents -- Image restoration of compact bound documents -- Intellectual Two-sided card copy -- Automatic cropping and deskew of multiple objects -- Mobile image/document enhancement -- Bottom-up Document Segmentation Method Based on Textural Features -- Document image classification on the basis of layout information -- Image/ Poster stitching -- Fast JPEG rate control -- Generation of PDF with vector symbols from scanned document -- Transformation of screenshot to metafile -- Embedding hidden data into hardcopy -- Embedding hidden data into hardcopy -- Micro-printing -- Creation of micro-pictures for secured printing -- Fast approach for toner saving -- Integraphic Printing.
Sommario/riassunto	This book continues first one of the same authors "Adaptive Image Processing Algorithms for Printing" and presents methods and software solutions for copying and scanning various types of documents by conventional office equipment, offering techniques for correction of

distortions and enhancement of scanned documents; techniques for automatic cropping and de-skew; approaches for segmentation of text and picture regions; documents classifiers; approach for vectorization of symbols by approximation of their contour by curves; methods for optimal compression of scanned documents, algorithm for stitching parts of large originals; copy-protection methods by microprinting and embedding of hidden information to hardcopy; algorithmic approach for toner saving. In addition, method for integral printing is considered. Described techniques operate in automatic mode thanks to machine learning or ingenious heuristics. Most the techniques presented have a low computational complexity and memory consumption due to they were designed for firmware of embedded systems or software drivers. The book reflects the authors' practical experience in algorithm development for industrial R&D. .
